

The Anchorage Amateur Radio Club News Bulletin

September 1996

Editor - Harvey E. Rookus NL7DK

Vol. 25, No. 9

**PROGRAM FOR
SEPTEMBER 6, 1996**

“STAMP PROGRAM”

Science Technology and Applied

Mathematics Program

by

Bill Rose

Dimond High School

What's Up?

General Meeting First Friday of Month - Carr-Gottstein Bldg APU Campus 7 pm
Second Bldg on the Left.

Board Meeting - Second Wednesday 7 pm - Carr Gottstein Bldg APU

VEC Testing - 1st Wed 6:30 pm, Carr- Gottstein Bldg., 2nd Saturday, 2 pm Hope
Cottage - Anchorage 530 W. International Airport Rd. Enter Rear of Bldg.

3rd Wednesday, VFW Hall - Eagle River 7 pm

No appointment needed. Bring copies of previous testing. Bring Photo ID.

AARC GENERAL MEETINGS are held on the first Friday evening of each month in the Carr-Gottstein Bldg, Alaska Pacific University Campus. The campus is located at 4101 University Drive and Bragaw St. Parking is available in the lot East of the building. The meetings begin at 7:00 PM and visitors are always welcome! The AARC legendary raffle is open to everyone!

AARC BOARD MEETINGS are held on the 2nd Wednesday evening of the month in Room 104 of the Carr-Gottstein Building on the APU campus. The meetings begin at 7:00 PM and are open to all club members and visitors.

ANCHORAGE ARES NET The Anchorage area Amateur Radio Emergency Services Net is held each Thursday evening at 8:00 PM on the KL7ION repeater on 147.30 (+600). Net control is Lil Marvin, NL7DL, and alternate NCS is KL7IO. The Westlink Amateur Radio report, Swap N Shop and the PARKA Net follow the ARES Net on the same frequency.

THE KL7AA REPEATERS sponsored by the club are as follows:

KL7AA 146.94 (-600) 100.0 or 141.3Hz tone. Anchorage area * ~ number for patch # to hang up. (5 min time limit)

Patch on 0600 - 2200 daily, 0700 - 2359 Fri/Sat, 0700 - 2200 Sundays. Emergency autodial enables 24 hrs a day. Emergency autodial numbers (10 minute resettable timer)

- 911 for life or death
- 912 Anch Police Dispatch
- 913 AK State Trooper Dispatch

hangs up Emergency numbers also

KL7AA 146.76 (-600) 141.3Hz tone Mt. Alyeska, and Girdwood areas.

KL7AA 224.94 (-1.6) NO TONE Anchorage area.

KL7AA 444.70 (+5.0) 100.0Hz tone Anchorage area. Patch enabled 24 hour a day. * ~ number for patch # hangs up patch. (5 minute time limit) Emergency autodial enabled 24 hours a day. (10 minute resettable timer).

- 911 Life or death
- 912 Anch Police Dispatch
- 913 AK State Trooper Dispatch

hangs up Emergency numbers also.

A reminder that not only is using an Amateur phone patch system to bypass the Long Distance carrier illegal, it can result in the loss of the entire phone patch system. Prefix's outside the Anchorage dialing area are disabled.

The repeater Trustee is William Reiter, KL7UTL. Doug Dickenson, KL7IKN is chairman of the UHF/VHF committee.

KL7AA PACKET OPERATIONS The KL7AA Packet BBS. Callsign of the PBBS is KL7AA-7 (ANCBBS). Callsigns of the multi-frequency switch are KL7AA-8 (AARC), KL7AA-7 & KL7AA-8, and operate on user frequencies of: 145.010 and 147.960 (147.960 is the statewide ADES provided backbone). Linking from 145.050, and 440.050 is provided through multi-frequency switches throughout the city.

KL7AA operates a high power Node switch on 145.01 from the Rabbit Creek area, with the callsign of KL7AA-1 (Ane), as well as a Node switch on the top of the ARCO Building in downtown Anchorage, on 145.050 KL7AA-5 (Ane5)

KL7AA also operates an HF Gateway with the callsign of KL7AA-10 (HF80) on 3.605 Mhz. This gateway has access to all local and stateside networks.

The AARC sponsors an Amateur Internet Gateway station, NL7NC-9 (AKGATE). This gateway is available from any of the local Node stations on 145.01, 145.05, 440.050, or 147.960.

A reminder that 147.960 is the state sponsored ADES backbone link connecting Fairbanks, Anchorage, Homer, Kodiak and Juneau together. User access for keyboard to keyboard activity is best accomplished between 1600 and 2200 daily, during this time, the Packet BBS stations will hold off from heavy bulletin forwarding.

ALL PBBS AND USER ACTIVITY IS SECONDARY TO EMERGENCY REQUIREMENTS OF THE ALASKA DIVISION OF EMERGENCY SERVICES (ADES).

AARC "HomePage On Internet"

<http://www.alaska.net/~lawson/aarc.html>

The Anchorage Amateur

Ham Radio Luncheon
Every Tuesday
Golden Lion Restaurant
11:30 'til 1:00

Let's all be responsible!

You say your Amateur License is important to you?

Fair Warning: Mail sent to amateurs that is returned to the Commission marked Address Unknown, Forwarding Expired, etc., is grounds for revocation of your Amateur Radio License.

If your address on your ticket is not the same as your present address, get a 610 form to submit to the FCC for an address change.

Request a 610 form from the FCC at this toll free number: (800) 418-3676. For customer assistance, dial (800) 322-1117 from 8 am-4:30pm ET Monday-Friday. The above taken from: Handi-Ham World.

The Anchorage Amateur Club Radio News Bulletin is the monthly newsletter of the Anchorage Amateur Radio Club. Permission is granted for reproducing articles appearing in the Anchorage Amateur that do not indicate a copyright separate from the Anchorage Amateur Radio Club. Letters to the Editor and articles for publication should be submitted to Harvey Rookus, NL7DK, 3310 Checkmate Drive, Anchorage 99508. Telephone number (907) 333-4893. E-Mail 73521,3316 Articles and Notices for the paper should be typewritten or on IBM compatible formatted computer disks (3.5 inch). Deadline for articles is the 20th of the month.

In the Matter of

Electronic Filing of License Renewal and Modification
Applications in the Amateur Radio Service

Order Adopted: July 16, 1996 Released: July 17, 1996

By the Deputy Associate Bureau Chief, Office of Operations:

We have received requests from several amateur operators in the Amateur Radio Service to allow the sixteen volunteer-examiner coordinators (VECs) to file, on their behalf, license renewal applications and modification applications (indicating change of name, change of mailing address, and change of call sign) electronically. The VECs are authorized to coordinate the efforts of volunteer examiners (VEs) who prepare and administer the Amateur operator license examinations for the Commission. For the reasons discussed below, VECs will be permitted, but not required, to file Amateur Radio Service license renewal and modification applications electronically. The Commission also will continue to accept applications filed manually (via hard copy).

We note, as an initial matter, that we anticipate developing a capability that will allow individual amateur operators to file their applications electronically and receive a license grant immediately. While this capability is evolving, however, we believe that the public interest would be served by affording amateur operators the opportunity to file their license renewal and modification applications electronically. The Communications Act

of 1934, as amended, authorizes the Commission to utilize the voluntary and uncompensated services of amateur operators in preparing and administering examinations for amateur operator licenses. The Commission relies upon the VECs to coordinate the efforts of the VEs. The VECs receive the application forms from the VEs, screen them and, for qualified examinees, forward electronically the data thereon or forward the application (via hard copy) to the Commission. Most such applications are filed electronically and this procedure has been highly successful in eliminating delays in obtaining licenses.

The available software, hardware, procedures and experience can similarly eliminate delays in processing of license renewal and modification applications.

Although electronic filing of applications for license renewal or modification is not a license examination preparation or administration function, we will permit any VEC to perform this additional function on behalf of amateur operators because such action is procedural in nature. We nonetheless will consider such activity to be separate from their responsibilities as VECs and require that, if provided, it be at no cost to the Government. In this connection, the compensation, if any, the organization receives as a result of providing this service is a matter that is between the amateur operators choosing to use the organization's services and the organization. In addition, no VEC organization will be required to perform this service, nor will it be mandatory that such applications be filed electronically. The Commission will continue to process renewal and modification applications filed via hard copy on FCC Form 610 with the Commission.

In view of the above, we find good cause for waiver of the Commission's Rules to allow any FCC Form 610 to be filed electronically by VECs. It is in the public interest to allow (but not require) these organizations to perform this function. This will provide for more efficient application processing for Amateur service license grants. Accordingly, Section 97.21 of the Commission's Rules, 47 C.F.R. § 97.21, which requires FCC Form 610 documents for the purpose of modifying the grantee's name, mailing address, or call sign to be submitted to: FCC, 1270 Fairfield Road, Gettysburg, PA 17325-7245, IS WAIVED to the extent that this requirement is considered satisfied when the FCC Form 610 document is received by a VEC, screened, and the data contained therein is forwarded electronically or on diskette to: FCC, 1270 Fairfield Road, Gettysburg, PA 17325-7245. Consistent with existing procedures, when the data is forwarded electronically, the VEC must retain the actual FCC Form 610 documents for at least fifteen months and make them available to the FCC upon request. All other applicable rules of the Federal Communications Commission pertaining to requirements for filing of applications are unaffected by this Order. This waiver may be terminated by the Commission at any time if, at its discretion, the need for such action arises.

FEDERAL

COMMUNICATIONS COMMISSION

Hollingsworth	W. Riley
Bureau Chief	Deputy Associate
Telecommunications Bureau	Office of Operations Wireless

ANCHORAGE AMATEUR RADIO CLUB'S
HAMFEST 1996

***** DATE *****
SEPTEMBER 21 & 22

: * TIME *****
SATURDAY: 10 AM TO 6 PM
SUNDAY: 8 AM TO 4 PM
SETUP: FRI. 5 to 9 PM
CLEAN UP: SUN 4 PM TO 6 PM

***** WHERE *****
KINCAID PARK "OUTDOOR CENTER"

**** HOW TO GET TO HAMFEST ****
GO 5 MILES WEST OF MINNESOTA AND RASPBERRY
TO THE WEST END OF RASPBERRY RD.

****** FLEA MARKET ******
****** V.E.C. TESTING ******
In adjacent Field House, SAT 10-3, SUN 10-12:30
****** GOOD TIMES ******
****** FRIENDSHIP ******

FOOD AVAILABLE, PLENTY OF OUTDOORS, MAYBE MOOSE,
SPECTACULAR ALASKAN VIEW OVERLOOKING FIRE ISLAND
MT. SUSITNA AND COOK INLET, BEST H.F. MOBILE SITE!
TALK-IN FREQUENCY 146.94, 147.30 AND 146.52 (simplex).
*** OPEN TO THE PUBLIC ***

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#206-V

August 1996

AMATEUR STATION VANITY CALL SIGN SYSTEM

A vanity call sign (a call sign selected by the FCC from a list of call signs requested by the station licensee or license trustee) may be requested for a primary or club station. The request must be made by the licensee or, in the case of a club station, by the club station license trustee, on FCC Form 610-V Amateur Radio Station Vanity Call Sign Request. It must be filed with the required fee. (See FCC Form 1070-V for mailing instructions and fee requirement.) RACES and military recreation stations are not eligible for vanity call signs.

The following call signs are not available for assignment:

- (1) KA2AA-KA9ZZ, KC4AAA-KC4AAF, KC4USA-KC4USZ, KG4AA-KG4ZZ, KC6AA-KC6ZZ, KL9KAA-KL9KHZ, KX6AA-KX6ZZ;
- (2) Any call sign having the letters SOS or QRA-QUZ as the suffix;
- (3) Any call sign having the letters AM-AZ as the prefix;
- (4) Any 2-by-3 format call sign having the letter X as the first letter of the suffix;
- (5) Any 2-by-3 format call sign having the letters AF, KF, NF or WF as the prefix and the letters EMA as the suffix;
- (6) Any 2-by-3 format call sign having the letters NA-NZ as the prefix;
- (7) Any 2-by-3 format call sign having the letters KP, NP or WP as the prefix and the numeral , 6, 7, 8 or 9;
- (8) Any 2-by-2 format call sign having the letters KP, NP or WP as the prefix and the numeral , 6, 7, 8 or 9;
- (9) Any 2-by-1 format call sign having the letters KP, NP or WP as the prefix and the numeral , 6, 7, 8 or 9.
- (10) Call signs having the single letter prefix (K, N or W), a single digit numeral , 1, 2, 3, 4, 5, 6, 7, 8, 9) and a letter suffix are reserved for the special event call sign system.

The requestor may list up to twenty-five call signs in order of preference. The exact prefix, numeral, and suffix must be given for each call sign. Requests stated in general terms such as, "Any call sign with my initials" or "Any call sign having the prefix (or

suffix) _____" will be dismissed. The first assignable call sign on the list for which the requestor is eligible will be shown on the license grant for the requestor's station and the original call sign will be vacated. Objections to the assignment of requested call signs will not be entertained at the FCC. However, this does not hamper any party from asserting such rights as it may have under private law in some other forum. Should it be determined by an appropriate forum that a station should not utilize a particular call sign, the initial assignment of a call sign will not serve as a bar to the making of a different assignment. The FCC does not consider an individual to be a former holder where the call sign was originally obtained through bribery, fraud, favoritism or other improper means.

A call sign is assignable two years following license expiration, surrender, revocation, set aside, cancellation, void ab initio, or death of the grantee. See Fact Sheet PR-5000 #206-S, Amateur Station Sequential Call Sign System, for explanations of call sign group, format, and prefix. The exceptions are:

- o Former holder - The two year requirement does not apply to an otherwise eligible primary station if the call sign was previously assigned to the primary, secondary, repeater, control, auxiliary link, or space station of the requestor.
- o Close relative of former holder now deceased - Upon the death of the holder, a call sign is assignable immediately to an otherwise eligible primary station of a close relative (the holder's spouse, child, grandchild, stepchild, parent, grandparent, stepparent, brother, sister, stepbrother, stepsister, aunt, uncle, niece, nephew, or in-law).
- o Request in memoriam - Upon the death of the holder, the call sign is assignable immediately to an otherwise eligible club station. The requestor must possess a written statement from a close relative, as listed above, of the deceased showing consent of the relative to the request.

Call sign group eligibility is determined by the requestor's class of operator license:

- o Amateur Extra - Group A, B, C, or D.
- o Advanced - Group B, C, or D.
- o General - Group C or D.
- o Technician Plus Class - Group C or D.
- o Technician Class - Group C or D.
- o Novice Class - Group D.

The only exception is:

- o Former holder - The operator class requirement does not apply to an otherwise eligible primary station if the call sign was previously assigned to the primary, secondary, repeater, control, auxiliary link or space station of the requestor.

Requestor's mailing address determines eligibility for call sign format and prefix:

- o One of the contiguous 48 states - Regions 1-10.

- o Alaska - Regions 1-11.
- o American Samoa - Regions 1-10 or a prefix in Region 13 having the numeral 8.

- o Commonwealth of Northern Mariana Islands - Regions 1-10 or a prefix in Region 13 having the numeral .

- o Guam - Regions 1-10 or a prefix in Region 13 having the numeral 2.

- o Hawaii - Regions 1-10 or a prefix in Region 13 having the numeral 6 or 7.

- o Puerto Rico - Regions 1-10 or a prefix in Region 12 having numeral 3 or 4.

- o Virgin Islands - Regions 1-10 or a prefix in Region 12 having the numeral 2.

The exceptions are:

- o former holder - The mailing address requirement does not apply to an otherwise eligible primary station if the call sign was previously assigned to the primary, secondary, repeater, control, auxiliary link, or space station of the requestor.

- o Close relative of former holder now deceased - The mailing address requirement does not apply to an otherwise eligible primary station of a close relative, as listed above.

- o Request in memoriam - The mailing address eligibility requirement does not apply in the case of an otherwise eligible club station for a vanity call sign call sign requested in memoriam. The requestor must possess a written statement from a close relative, as listed above, of the deceased showing consent of the relative to the request.

Starting gates are being used to implement the system in stages. Applications filed before the appropriate starting gate opens will be dismissed. A public notice will announce the opening of each gate. The remaining gates are:

Gate 2. An Amateur Extra Class operator may request a Group A, B, C, or D call sign for his or her primary station.

An Amateur Extra Class operator may request, including request in memoriam, a Group A, B, C, or D call sign for the club station for which he or she is license trustee.

A license trustee of a club station that held a club station license grant on March 24, 1995, may request in memoriam the call sign previously shown on the station license of a deceased person who was a member of the club. (Opened at Gate 1(A).)

A primary station licensee of any class operator may request a vanity call sign under the former holder or the close relative of former holder now deceased provisions. (Opened at Gate 1.)

A club station licensee trustee of any class operator may request the call sign previously shown on the club station license. (Opened at Gate 1.)

Gate 3. An Advanced Class operator may request a Group B, C, or D call sign for his or her primary station.

An Advanced Class operator may request, including request in memoriam, a Group B, C, or D call sign for the club station for which he or she is license trustee.

Gate 4. A General, Technician Plus, or Technician Class operator may request a Group C, or D call sign for his or her primary station.

A General, Technician Plus, or Technician Class operator may request, including request in memoriam, a Group C, or D call sign for the club station for which he or she is license trustee.

A Novice Class operator may request a Group D call sign for his or her primary station.

For further information, contact the FCC's Consumer Assistance Branch at 1-800-322-1117, or (717) 338-2500, Monday through Friday, 8 a.m. - 4:30 p.m. Eastern time.

-FCC-

The following comments by Neil Marchbanks, National Weather Service, last month's speaker

ANCHORAGE AREA NEXRAD

Location	60/43/34 N 151/20/57 W
Frequency	2800 Mhz
Peak Output Power	.75 MW
Wave Length	10.53 cm
Pulse Width	1.57 micro second

At the meeting held on Friday, August 2, 1996 some individuals expressed some concern about possible dangers from the peak power. I am including a write-up on Human Health factors which was published by the National Weather Service in 1993, before the radar tower was erected at Nikiski.

"The effects of microwave radiation are often confused with the effects of higher frequency radiation such as ultraviolet light, X-rays, and gamma rays. These higher frequency forms of radiation are called ionizing radiation because they can displace electrons from molecules in the human body, causing permanent damage. Microwave radiation (such as will be emitted by NEXRAD) is called nonionizing radiation because it cannot displace electrons. However, nonionizing radiation can cause heating of body tissues if the amount absorbed by the tissue exceeds the ability of the body's thermoregulatory system to dissipate heat.

The heating effects of microwaves can be understood by analogy to visible light. Both visible light and microwaves can increase the vibration rate of molecules, an effect that at a macro-scale is called heating. Excessive heating can be dangerous, as exemplified by sunstroke; hence, the rate of heating is critical. Many adverse biological effects have been shown to result from exposure to RF radiation that exceeds the body's ability to dissipate heat. A limited number of biological effects have also been demonstrated from exposure to non-thermal levels of RF radiation, but those effects have not been demonstrated to be harmful. Microwaves heat most effectively those objects that have sizes, shapes, or compositions that trap the radiation through resonance of absorption. Both resonance and absorption rates are very sensitive to the frequency used. The NEXRAD system will use frequencies that are inefficiently absorbed by humans and wildlife, and consequently cause little heating. The amount of energy absorbed by humans exposed to NEXRAD RF radiation is well below the ability of the body's thermoregulatory system to dissipate heat. Thus, exposure to NEXRAD RF radiation will not cause heating of body tissues.

When a NEXRAD antenna is at its lowest practical height (i.e., on a 5-m tower), the highest RF radiation average power density to which the general public could be exposed is expected to be 0.003mW/cm sqd--more than a factor of 600 lower than the current U.S. standard

(1.8 to 2.0 mW/cm sqd) for the NEXRAD operating frequencies.¹ With the NEXRAD antenna on the proposed 30-m tower, the highest RF radiation average power density to which the general public could be exposed at the base of the tower is expected to be 0.0003 mW/cm sqd--more than a factor of 6,000 lower than the current U.S. standard. Significantly higher exposure levels will be possible only if some combination of radar tower height and terrain elevation or structure height causes illumination by the main beam. However, the highest average power density in the main beam that someone on or very near the radome could experience will be approximately 0.6mW/cm sqd, about one-third the U.S. standard. The radiation intensity of bright sunlight is more than 100 mW/cm sqd--that is, more than 50 times as large as the U.S. standard for microwave radiation, and more than 333,300 times as large as the 0.0003 mW/cm sqd calculated for NEXRAD at this tower height. This comparison makes it clear that the body heating effect of NEXRAD will be negligible."

I added the underlining about bright sunlight, otherwise this is a direct quote from NWS literature. Always keep in mind that the antenna is rotating and the "beam" is not constant. Actually this is not a true beam, it is a series of pulses (and very short duration pulses, at that).

Neal Marchbanks

¹IEEE C95.1-1991, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3kHz to 300 Ghz," Institute of Electrical and Electronics Engineers, Inc., New York City, New York (1991).

If you are interested in becoming a "Snow Observer" as described by Neil Marchbanks at the August meeting, drop him a note :

Mr. Neil Marchbanks
National Weather Service
222 West 7th Avenue #23, Rm. 517
Anchorage, AK 99513-7575



September 1996

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 Labor Day	3 [11:30a]Ham Radio Luncheon Golden Lion Restaurant	4 [6:30p]VEC Testing APU CG-rm103	5 [8:00p]ARES Net 147.90/30	6 [7:00p]AARC General Meeting APU CG Bldg Rm103	7
8	9	10 [11:30a]Ham Radio Luncheon Golden Lion Restaurant	11 [7:00p]AARC Board Meeting APU CG Rm 104	12 [8:00p]ARES Net 147.90/30	13	14
15	16	17 [11:30a]Ham Radio Luncheon Golden Lion Restaurant	18 [6:30p]VEC Testing Eagle River VFW	19 [8:00p]ARES Net 147.90/30	20	21 Hamfest
22 Hamfest	23	24 [11:30a]Ham Radio Luncheon Golden Lion Restaurant	25	26 [8:00p]ARES Net 147.90/30	27	28 [10:00a]PARCA Meeting T.B.A.
29	30					

Address Correction Requested

Bulk Rate
U.S. Postage
PAID
Anchorage, AK
Permit 223

Roger Hansen KL7HFQ L036
POB 520343
Big Lake AK 99652-0343
|||

Contact Ed NL7VP @
243-4348H or 249-3151 W

Location not finalized, but
NOT, NOT at either of the
Royal Forks!!